

WHAT IS CLAIMED IS:

1. A power converter for converting an output from a power source having an unstable output voltage, comprising:

5 a transformer, wherein a primary winding has two or three turns; and

a converter, arranged to supply DC power supplied from the power source to the transformer by switching the DC power, thereby boosting the output voltage from
10 the power source by a few ten times to a few hundred times.

2. The converter according to claim 1, wherein the converter boosts the output voltage from the power source by 25 to 500 times.

15 3. The converter according to claim 1, wherein the power source is a solar cell.

4. The converter according to claim 1, wherein the power source is a single-cell solar cell.

5. The converter according to claim 1, wherein the
20 converter performs switching at a fixed frequency and fixed duty.

6. The converter according to claim 1, further comprising an inverter arranged to convert the output DC power from the converter into AC power by a
25 switching operation which holds the output voltage from the converter substantially constant.

7. An electric power generator comprising:

a power source having an unstable output voltage;
and

a power converter cited in claim 1.

8. The generator according to claim 7, wherein the
5 generator has the power converters in number
corresponding to a rated output power of the generator.

9. The generator according to claim 7, further
comprising an inverter arranged to convert the output
DC power from the converter into AC power by a
10 switching operation which holds the output voltage from
the converter substantially constant, thereby
generating an output of the generator.

10. The generator according to claim 7, wherein the
generator is interconnected to a commercial power
15 system.

11. The generator according to claim 7, wherein the
power source is a solar cell.

12. The generator according to claim 7, wherein the
power source is a single-cell solar cell.

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